Ergofokus
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USER MANUAL

ORIGINAL FOR
ADJUSTABLE-HEIGHT WORKBENCH
MODEL LIMBO

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1 General Information

This adjustable-height workbench has pivoting wheels and it can easily be moved. It is designed to provide an ergonomically correct and variable working height, as well as to facilitate internal transport and handling of goods as needed.

1.1 Function of the System

Ljunggren & daughters adjustable-height Limbo workbench consists of a bottom chassis with four wheels, a mechanical lifting mechanism and an upper chassis, as well as a benchtop and control panel. The benchtop can be raised or lowered by means of the two buttons on the control panel. The benchtop is pushed upward and pulled downward by a 3-piece telescoping lifting column.

All four wheels are pivoted, which allows the workbench to be easily steered in the direction the operator wishes. However, each wheel can also be locked in brake mode for stationary work.

The workbench is operated either by 230-volt mains power or by 24-volt battery.
The battery is charged separately using the included charger, which in turn is connected to a 230 V power supply. Once the battery is charged, it is moved and connected to the docking unit under the benchtop.

In order to raise and lower the benchtop, press the upward arrow and downward arrow buttons on the control panel.

Control panel with arrows pointing up and down.

1.2 Product Warranty

Ljunggren & daughtersôworkbench is covered by a warranty against manufacturing defects for a period of 12 months following the date of manufacture.
Ljunggren & daughtersôwarranties will only be honoured provided that the workbench has been used in the manner intended and as long as it has not be disassembled or subjected to any kind of tampering.

2 Prohibitions – Warnings - Requirements

2.1 General Information

- The workbench may only be used as an adjustable-height workbench when the brake is engaged and as a trolley for internal transport of goods when the brake is not engaged.
- It must be used and stored indoors.
- When necessary, the workbench can be lifted by its polyethylene benchtop. N.B.! Do not tug!
- The workbench must not used for continuous and sustained raising and lowering. A maximum of 2 minutes of operation should then be followed by at least 18 minutes of downtime.
- Maximum load on the workbench is 100 kg.
- Place heavier loads toward the centre of the benchtop. The centre of the maximum load must not be closer than 150 mm from the edge of the benchtop.
- This operating manual must always be available for reference when needed.

2.2 Hazard Notices

- The workbench is designed to minimise the risk of crush injuries. However, be cautious when raising and lowering so that no part of your body, such as fingers, or any products or table edges end up between adjacent fixtures or other nearby objects.
- The workbench may only be used on a flat, hard floor. Avoid using it on inclined or slippery surfaces.
- When the workbench is moved while goods are on the benchtop, make sure that the goods are located toward the centre. Keep in mind that there may be refuse or other objects on the floor that can cause a sudden stop when moving the workbench. This runs the risk of having the goods slide off, or in the worst case, the workbench may tip over.
- Do not place the workbench against anything with a horizontal edge. Such runs the risk of a hand or other part of the body being pinched between the benchtop and this edge when the benchtop is lifted upward.
- The maximum load on the workbench must not be exceeded, statically or dynamically.

2.3 Use of the Machine

The workbench may only be used as an adjustable-height workbench when the brake is engaged and as a trolley for internal transport of goods when the brake is not engaged.

The workbench must not be used as:
- A lifting jack
- A lift for persons
- A clamping device
- A counterstay
- A pressing machine
- The workbench must not be used or stored in environments that would subject it to corrosion or to mechanical, thermal or chemical damage or to strong electromagnetic fields.

It is expressly forbidden to use the workbench in environments that exceed the limits indicated in this operating manual.

2.4 Maintenance and Repair

- If an incident occurs such that repairs to the workbench must be made, always remove the battery from the docking unit under the benchtop first, or else remove the electrical plug from the wall socket (depending on whether the workbench is mains-powered or battery-operated).
- Ljunggren & daughtersôproduct liability is extends only to products that were defective coming from the factory. Ljunggren & daughtersôproduct liability will be disclaimed in part or in whole if the user does not follow the care instructions or uses spare parts that are not original.

For each repair, there is a written set of instructions available in order to minimise the risk of error; request such instructions when you order the spare parts and read them thoroughly before you begin effecting repairs.

In order for a product warranty to be valid following a repair, the following conditions apply:
- Only original parts may be used when making repairs.
- No modifications may be made to the products, lifting column, battery, docking unit, battery charger, ECU or control panel.
- Repairs shall be made according to the enclosed instructions.
- Following the repair, the workbench must continue to be used only in accordance with the specified data.

3 Operatorôs Manual

3.1 Function of the System

Ljunggren & daughters adjustable-height Limbo workbench consists of a bottom chassis with four wheels, a mechanical lifting mechanism and an upper chassis, as well as a benchtop and control panel. The benchtop can be raised or lowered by means of the two buttons on the control panel. The benchtop is pushed upward and pulled downward by a 3-piece telescoping lifting column.

All four wheels are pivoted, which allows the workbench to be easily steered in the direction the operator wishes. However, each wheel can also be locked in brake mode for stationary work.

The workbench is operated either by 230-volt mains power or by 24-volt battery.
The battery is charged separately using the included charger, which in turn is connected to a 230 V power supply. Once the battery is charged, it is moved and connected to the docking unit under the benchtop.

The system is not intended for continuous operation!

3.2 Operation

The height of the workbench is adjusted using the upward arrow for up and the downward arrow for down. Adjust the workbench to the working height offering the best working ergonomics for the moment, then when loading or unloading goods, set it to the height that offers the best ergonomics for that purpose.

Set the brakes on all the wheels for safe loading and unloading.

When moving with heavier objects, lower the benchtop to a low level in order to obtain greater stability, release the brakes and then, using both hands, guide the workbench toward the desired location.

When necessary, the workbench can be lifted by its polyethylene benchtop. N.B.! Do not tug! The benchtop is fixed in place and can only be affected by means of the buttons on the control panel.

3.3 Safety

The workbench is designed to minimise the risk of crush injuries. However, be cautious when raising and lowering so that no part of your body, such as fingers, or any products or table edges end up between adjacent fixtures or other nearby objects.

The workbench charger or connector plug may only be connected to mains outlets of the same voltage as indicated on its rating plate. Only original batteries may be used for battery-operated workbenches.

No repairs to the workbench may be made as long as the battery is in its docking unit under the benchtop or if the mains plug is plugged into the wall socket.

3.4 Starting and Stopping

The workbench has no particular start or stop switch. The benchtop can only be moved by keeping the upward button or downward button depressed.

3.5 Problems during Operation

If any problems occur while raising or lowering the platform, immediately let go of the button on the control panel. All movement will cease! Then carry out the necessary corrective measure. Refer then, if necessary, to the ñTroubleshootingò section further on in this instruction manual.

3.6 Consumable Supplies

The workbench contains no consumable parts. However, if the Limbo is operated by battery, the battery, like all batteries, has a limited lifetime. When the run-time following each charging is diminished, it is time to replace the battery.

3.7 Maintenance

The workbench is maintenance-free given ordinary use and thus needs no servicing.

Normal cleaning shall be done using a mild cleaning agent (*e.g.,* dish detergent or washer fluid such as the kind used in cars).

Powerful cleaning agents containing, for example, acids, ammonia or lye must not be used.

The workbench can be cleaned using running water, however not under high-pressure. If the workbench is being run on 230 V, always unplug the mains plug from the wall socket before cleaning with water!

3.8 Handling of User Manual

It is important that all those using the workbench read through and have access to this user manual.

4 Assembly - Disassembly - Reparation

4.1 Disassembly or Scrapping of the System

All work done to the workbench, regardless of whether it is assembly, disassembly, repairs or anything else, shall only be done by removing the battery first, or else by unplugging the mains plug from the wall socket.

The ECU, control box, lifting column, battery, docking station and charger must be turned in at a suitable hazardous waste destruction or waste management facility when scrapping the workbench. The rest of the workbench consists of fully recyclable and thereby environmentally friendly parts.

4.2. Repairation and Spare Parts

The only repair measure available for the lifting column, battery, docking unit, charger, ECU or control panel is simply to replace the entire unit; they must not be taken apart. This is to prevent the risk of malfunction. All these units are supplied as spare parts from Ljunggren & daughters or its representative.

For each repair, there is a written set of instructions available in order to minimise the risk of error; request such instructions when you order the spare parts and read them thoroughly before you begin effecting repairs.

State the designation from the product's rating plate when ordering.

In order for a product warranty to be valid following a repair, the following conditions apply:

- Only original parts may be used.
- No modifications may be made to such units as the lifting column, battery, docking unit, battery charger, ECU or control panel.
- All repairs must be made according to the enclosed instructions.
- The workbench must continue to be used only in accordance with the specified data.

4.3 Troubleshooting

The benchtop does not move either when pressing the upward or downward button.

1. Check that the workbench's mains plug is connected to the wall socket, or that the battery is properly connected to the docking unit.
2. Make sure that there is mains voltage reaching the wall socket and that no fuse has been blown, alternatively that the battery has been charged.
3. Make sure that there is no damage to the cords or to their connections. *If such is the case, order new units from Ljunggren & daughters or its representative.*

The benchtop does not move when I press the upward button.

1. *The benchtop is at its maximum height.*

The benchtop does not move when I press the downward button.

1. *The benchtop is at its lowest possible height.*

5 Product Specification

Product:
Ljunggren & daughters adjustable-height workbench model Limbo.

Model:
L&D adjustable-height workbench model *Limbo, electrically powered* with:
Lifting column, item no. BL141HA01400A
Control panel, item no. TP1010+00-SE
ECU, item no. CB8001T60-0010

L&D adjustable-height workbench model Limbo, *battery powered* with:
Lifting column, item no. BL141HA01400A
Control panel, item no. TP1010+00-SE
Docking unit, item no. CBJ2001A001091
Battery charger, item no. CHJ200000A011
Battery (2 pcs), item no. BAJ100000011

Functional Principle of the System:
A mechanical telescopic lifting column with chain drive directly affecting the benchtop.

Operating Conditions:
The workbench must not used for continuous and sustained raising and lowering. Maximum 2 minutes of operation and then at least 18 minutes of downtime.

Maximum Load:
The benchtop may hold a maximum load of 100 kg. This load must not be exceeded.

Physical Dimensions:

Depth	650	mm
Width	800	mm
Maximum height of benchtop	970	mm
Minimum height of benchtop	570	mm
Weight, Limbo electrically powered	33	kg
Weight, Limbo battery powered	35	kg
Weight, stainless steel benchtop	+ 5	kg

Temperature Ranges:
Operation: +5 to +40 °C
Storage: -10 to + 50 °C

Electrical Supply:
Frequency: 50 – 60 Hz
Primary voltage: 230 V AC
Secondary voltage: 24 V DC (if Limbo is supplied with battery power).
Maximum power consumption: 250 W
IP classification: X5
5 = (Protected against running water from a nozzle)

EMC Requirements:

Sources of interference with emissions of electromagnetic or electrical fields (for example, high current cables) that are stronger than what is allowed according to the applicable EMC directives must not be located in the vicinity of the electrical parts of the workbench.

Suitable Fire Fighting:

Carbon dioxide, power-foam extinguishers or water mist. Do not use water streams.

Cleaning:

Normal cleaning shall be done using a mild cleaning agent (*e.g.,* dish detergent or washer fluid such as the kind used in cars). Powerful cleaning agents containing, for example, acids, ammonia or lye must not be used.

Environmental Considerations:

The ECU, control box, lifting column, batteries, docking units and charger must be turned in at a suitable hazardous waste destruction or waste management facility when scrapping the workbench. The rest of the workbench consists of fully recyclable and thereby environmentally friendly parts.

Noise Level:

The noise level of the workbench does not exceed 70 dB (A).

Warranty:

Ljunggren & daughtersôworkbench is covered by a warranty against manufacturing defects for a period of 12 months following the date of manufacture.
Ljunggren & daughtersôwarranties will only be honoured provided that the workbench has been used in the manner intended and as long as it has not be disassembled or subjected to any kind of tampering.

6 EC Declaration of Conformity for Machinery

Ljunggren & daughters AB
Backes väg 3
784 54 Borlänge
Sweden

Declares under its sole liability that the workbench designated as:

L&D adjustable-height workbench
Model Limbo
Mains operation, 230 V ☐
Battery operation, 24 V ☐
Serial No.:_____

Conforms to all the applicable provisions set out in the ñEssential Health and Safety Requirements Relating to the Design and Construction of Machineryò according to the European Parliamentôs and Councilôs Directive 2006/42/EC, which is published in the *Official Journal of the European Union*.

Technical documentation is the responsibility of:

Björn Bok
Ljunggren & daughters AB
Backes väg 3
784 54 Borlänge
Sweden

Borlänge, on _____

Sara Ljunggren

LIMBO Workbench

Adjustable 400 mm

Max. height 970 mm

Min. height 570 mm

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